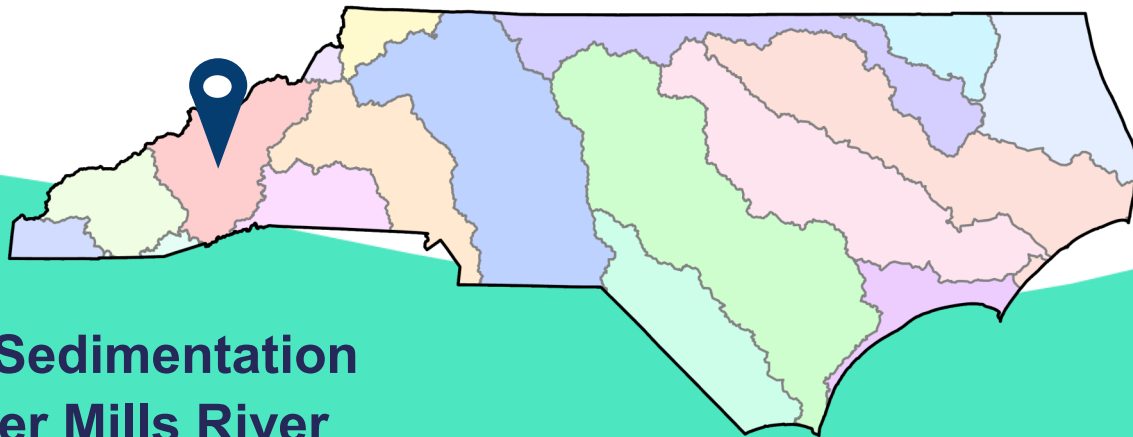




NC
319
Grant



Reducing Sedimentation in the Lower Mills River

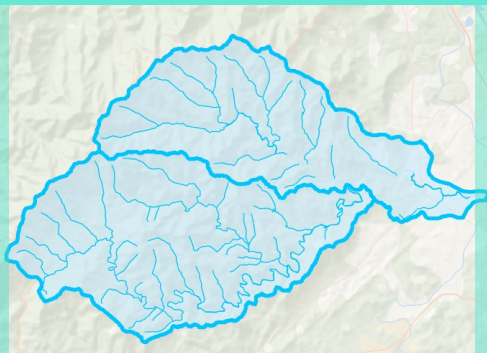
Overview

River Basin: French Broad

County: Henderson

319 Funding: \$230,000

Total Project Costs: \$697,000



Mills River (bottom) and South
Fork Mills River (top)
watersheds



Kids in the Creek outreach event



Project Background

The Mills River Watershed provides exceptional trout fishery habitat, irrigation for over 1,000 acres of crops, and water to over 80,000 households in Henderson County. Although the upper reach of the Mills River is protected by Pisgah National Forest, the lower third is exposed to development and intensive agriculture. In the late 1990s, the lower North Fork, lower South Fork, and Mills River were cited on the 303(d) list of impaired waters due to erosion, sedimentation, and pesticide issues. To address these water quality concerns, the **Mills River Partnership (MRP)** formed in 1998 and went on to develop the [Mills River Integrated Watershed Management Plan](#) in 2015. The EPA Clean Water Act [319 grant](#) has been critical to addressing water quality in the watershed, partially funding both the watershed planning process as well as a string of watershed restoration projects since 2012.

Project Approach

This 2015 319 grant-funded project is part of ongoing effort to reduce sedimentation, as well as other non-point source pollutants. The MRP collaborated with several landowners to implement best management practices (BMPs) on and adjacent to streams. The project utilized a holistic approach, which included agricultural BMPs, stream restoration, and stormwater control measures. This multi-pronged approach provides multiple in-stream benefits by stabilizing streambanks, restoring aquatic habitat, and reducing the amount of pollutants reaching the streams. Already, the 319-funded projects have yielded measurable improvements in turbidity in the rural upper watershed. Further efforts will focus on the emerging impacts of increasing development downstream.

Before

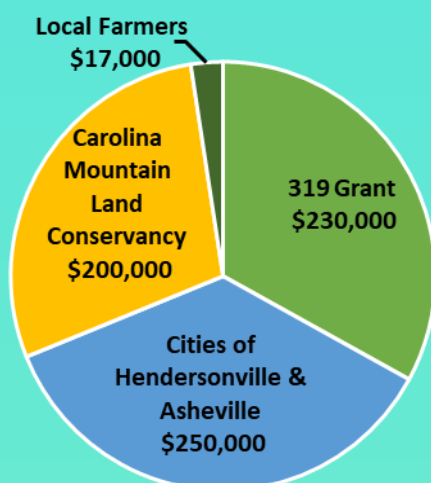


After



Stream Restoration- The project team regraded 600 lf of an incised stream bank on this property to create a natural slope, installed coir logs and over 800 live stakes, and enhanced 800 lf of riparian buffer with trees and shrubs.

Project Funding



**Match amounts include cash and in-kind services*

319 Grant Administrator: Rishi Bastakoti
Email: rishi.bastakoti@ncdenr.gov
Telephone: (919) 707-3623

BMPs Implemented

Agricultural Land BMPs

Field border improvements
3,000 ft Vegetated drainage
2 acres Riparian vegetation improvements

Stream Restoration BMPs

2,5000 ft Stream bank stabilization
3 acres Riparian area vegetation

Livestock Land BMPs

Livestock exclusion fencing
2 acres Riparian area vegetation
3 Stream Crossings

Stormwater Control Measures

1 acre Wetland creation
Rain barrels

Outreach Efforts

Several educational opportunities were held throughout the project period including outreach events, volunteer days, workshops including "Shade Your Stream", and education for over 2,500 students in "Kids in The Creek" type classes. Outreach efforts included:

- Water pollution lessons for ~900 8th graders
- Big Sweep river cleanups with ~40 volunteers cleaning over 1 ton of trash from the Mills River
- Outreach at Farm City Day reaching ~500 spectators
- 12 educational signs for the Mills River Stewards program
- A Spanish/English language brochure
- 3 backyard stream workshops reaching ~60 attendees
- 1 rain garden workshop for 25 people
- 6 volunteer planning events totaling 75 attendees

Learn more about the 319 Grant on the North Carolina Department of Environmental Quality [website](#).

